

## World Agriculture & Trade



Fred Gale

# China's Increasing Presence In the Global Trade Of Vegetables & Fruits

China raised its profile in the global market for vegetables and fruits in the 1990s. As one of the world's top exporters of vegetables and fruits, China increased its export value of those products from \$2.3 billion to \$3.1 billion between 1992-94 and 1998-2000, a rise of 33 percent. With improvements in production, marketing, and transportation technologies, China has strengthened its competitive position in the world market, particularly for vegetables. Though a relatively low-volume importer, China also expanded its import value of vegetables and fruits more than fourfold to reach \$413 million during the same period.

### A Large Net Exporter

During 1998-2000, China's exports ranked eighth in world exports of vegetables and fruits (including pulses and tree nuts) and amounted to nearly eight times the level of imports. China had trade surpluses in all groups of fruits and vegetables, except for a relatively small deficit in fresh fruits. Processed products (canned, frozen, dehydrated) represented the largest component of China's trade surplus in vegetables and fruits.

**Export composition.** With the substantial growth in China's vegetable and fruit exports in the 1990s came changes in the composition of exports. The most dramatic was in juices, whose export value increased 18-fold from 1992-94 to 1998-2000 and whose share of China's total export value of vegetables and fruits increased from 0.4 to 4 percent during the same period. Export shares of other categories of vegetables and fruits changed as well, but less dramatically:

- processed products, from 60 to 64 percent of China's vegetable and fruit exports;
- fresh vegetables, from 13 to 14 percent;
- fresh fruits, no change (6 percent for both periods);
- pulses, from 14 to 8 percent; and
- tree nuts, from 7 to 5 percent.

**Export markets.** Asia has been the dominant destination for China's vegetable and fruit exports, accounting for 68 percent of China's overall vegetable and fruit exports during 1998-2000. The European Union (EU) was a distant second, taking 14 percent. Asia was the leading destination for all categories of China's vegetable and fruit exports: fresh fruits (75 percent), fresh vegetables (79 percent), processed vegetables and fruits (69 percent), tree nuts (65 percent), pulses (54 percent), and juices (29 percent).

While Asia is the largest export market for China's juices, its market share is comparable to those of the EU (25 percent) and the U.S. (27 percent). Expansion of China's juice exports to non-Asian countries occurred only recently and not without consequences. The dramatic surge of imported Chinese apple juice to the U.S. led to rulings in May 2000 by the U.S. Department of Commerce and U.S. International Trade Commission that the U.S. may impose antidumping duties of up to 52 percent on apple juice from China.

**Import growth and sources.** While China has been a major exporter in overall vegetable and fruit trade for years, it has been a minor importer. But, in the 1990s, its import growth outpaced export growth, albeit from a lower base. Fresh fruit imports have dominated China's overall imports of fruits and vegetables, increasing steadily from less than 20 percent of the total import value of fruits and vegetables in the early 1990s to more than 60 percent in 2000. As a result, China has had a small trade deficit in fresh fruits since 1998.

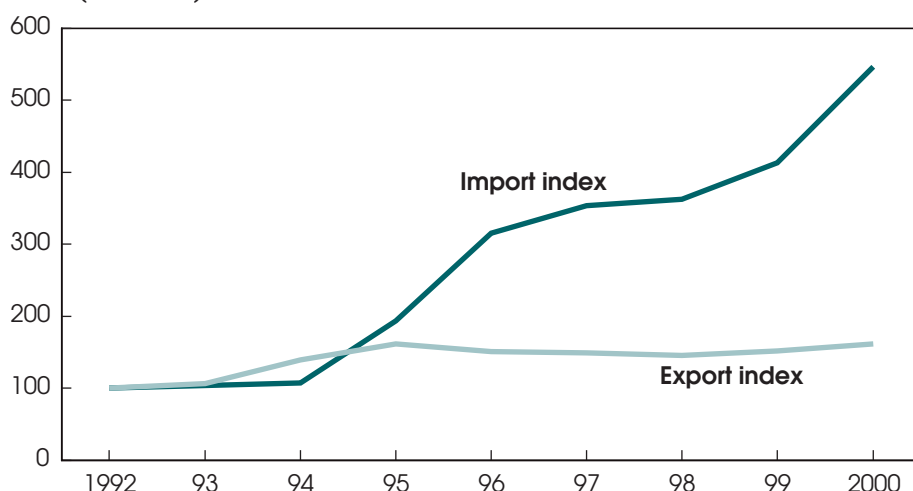
Most of these fresh fruits come from South America and Asia, which together accounted for 82 percent of China's fresh fruit imports in 1998-2000. However, anecdotal evidence suggests that a substantial amount of fresh fruit enters China via Hong Kong and is not captured in the official data.

This article draws on data from the Global Agricultural Trade System (GATS), prepared by USDA's Foreign Agricultural Service. GATS in turn uses data from the United Nations Trade Statistical Office.

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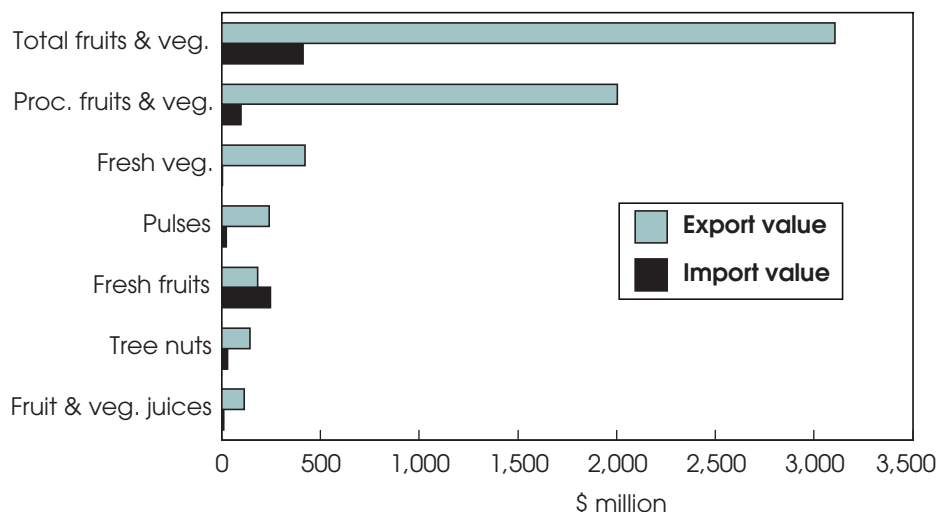
### Growth in Imports Has Outpaced Exports in China's Fruit and Vegetable Trade. . .

Index (1992=100)



Index is based on value.

### . . .but China Is Still A Large Net Exporter of Vegetables and Fruits



Source: Global Agricultural Trade System, Foreign Agricultural Service, USDA.  
Economic Research Service, USDA

### Destination: Japan

The dominance of Asia in China's vegetable and fruit export market during the 1990s can be attributed largely to one country: Japan. Forty-seven percent of China's fruit and vegetable exports in 1998-2000 went to Japan, up from 38 percent in 1992-94. Meanwhile, China's exports to other Asian countries declined—from 27 to 20 percent.

Japan received 55 percent of China's processed fruit and vegetable exports and half of its fresh vegetable exports during 1998-2000. To a lesser degree, Japan is also a strong market for China's exports of other fruits and vegetables, with the notable exception of fresh fruits. Japan received only 3 percent of China's fresh fruit exports, while other Asian countries imported 72 percent.

China's advances into Japan's lucrative fruit and vegetable market challenged the market position of other suppliers, most notably the U.S. China and the U.S. have long been the two leading suppliers for Japan's overall imports of fruits and vegetables, together accounting for nearly 60 percent of the market during 1998-2000. In 1999, China displaced the U.S. as the leading supplier of fruits and vegetables to Japan. U.S. share of the Japanese market for fruit and vegetable imports declined from 32 percent during 1990-92 to 29 percent during 1998-2000, while China's share increased almost uninterrupted from 17 percent to 30 percent during the same period.

Though China has surpassed the U.S. in overall market share in Japan's imports of vegetables and fruits, competition between the two countries is limited mainly to specific products.

In the category of *processed fruits and vegetables*, the growth of China's exports to Japan in the 1990s was largely in frozen vegetables. Japan imported a wide range of frozen vegetables from China, including legumes, spinach, and mixed vegetables. In contrast, Japan's imports of processed products from the U.S. have been concentrated in a few items. Potatoes (both frozen and other processed), sweet corn (both frozen and canned), and raisins have together accounted for more than half the value of U.S. processed products imported by Japan. A negligible portion of Japan's imports of potatoes and sweet corn came from China.

Frozen vegetables have traditionally dominated Japan's imports of U.S. processed products, and throughout the 1990s, these U.S. frozen vegetable shipments were largely prepared potatoes (mainly french fries) and sweet corn. These two vegetables accounted for 73 percent and 15 percent, respectively, of Japan's imports of U.S. frozen vegetables during 1998-2000. While China's share of Japan's import market for frozen prepared potatoes and frozen sweet corn was negligible, the U.S. was the leading supplier of Japan's imports of these two frozen vegetables, with a market share of 87 percent and 80 percent, respectively, during 1998-2000. As a result, competition between China and the U.S. in Japan's import market for

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processed products in general and frozen vegetables in particular tended not to be serious.

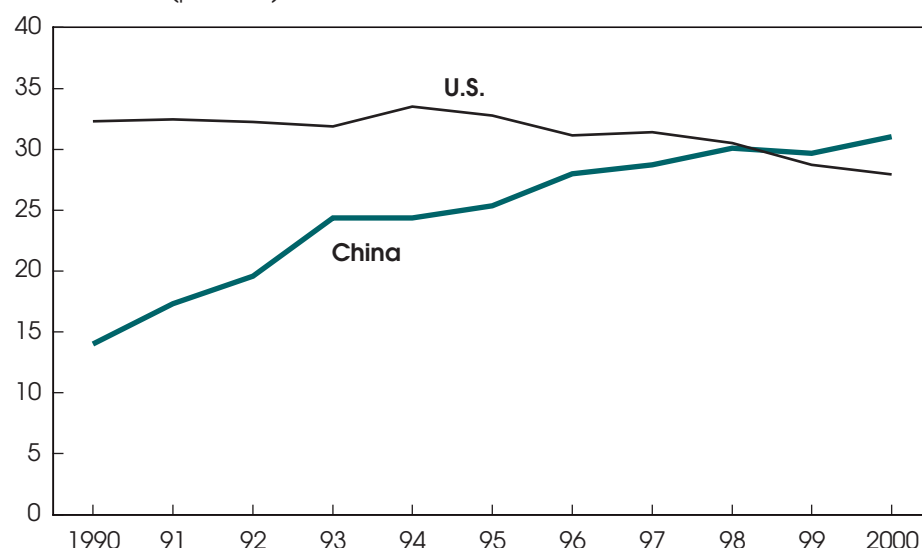
In contrast, Chinese *fresh vegetables* pose strong challenges to the U.S. in the Japanese market, though the U.S. and China export different types of fresh vegetables to Japan. During the 1990s, China substantially increased its value share in the Japanese market for fresh vegetables across the board. Notable examples of market share gains between 1990-92 and 1998-2000 are mushrooms (from 20 to 65 percent), radishes (from 3 to 76 percent), peas (from 46 to 99 percent), leeks (from 82 to 91 percent), and garlic (from 92 to 99 percent). These five accounted for 85 percent of Japan's fresh vegetable imports from China during 1998-2000.

In addition, firms operating in China increased their market share in Japan for newer fresh vegetable exports. Examples were edible brassicas, mainly broccoli and cabbages (from 2 to 11 percent), onions (from almost 0 to 16 percent), carrots and turnips (from 3 to 76 percent), and spinach (from 17 to 64 percent).

Japan's leading fresh-market vegetable imports from the U.S. during 1998-2000 were concentrated on edible brassicas, mostly broccoli; onions, including shallots; and asparagus. The U.S., like China, enlarged its market shares of these vegetables. Between 1990-92 and 1998-2000, edible brassicas from the U.S. went from an 80-percent share to 84 percent of the Japanese market; onions from 28 to 52 percent; and asparagus from 28 to 20 per-

### China Has Edged Out the U.S. in Japanese Fruit and Vegetable Market

Market share (percent)



Source: Global Agricultural Trade System, Foreign Agricultural Service, USDA.  
Economic Research Service, USDA

cent. For asparagus, China's very small share increased from 0.3 percent to just 1.1 percent. So, at least for two major U.S. fresh vegetable exports to Japan, China provides serious competition.

### An Emerging Market for U. S. Exports

In the 1990s, China substantially increased its overall imports of fruits and vegetables—to the benefit of U.S. exporters. China's imports of fruits and vegetables from the U.S. increased from \$15.7 million in 1992-94 to \$68.9 million

in 1998-2000. Among all categories of these imports, fresh fruits grew the fastest, although the U.S. market share was relatively small. U.S. share in China's fresh fruit import market grew from less than 4 percent in 1992-94 to nearly 10 percent in 1998-2000. If bananas, China's dominant fresh fruit import, were excluded, this growth would be even more dramatic – from 8 percent to nearly 27 percent during the same periods.

Grapes, citrus fruits, and apples accounted for 98 percent of China's major fresh fruit imports from the U.S. during 1998-2000.

### Destinations for China's Vegetable and Fruit Exports

Item	China exports	Destinations								
		Japan	Other Asia	Aus. & NZ	U.S.	EU	FSU	Canada	Mid. East	Others
	<i>\$million</i>					<i>Percent</i>				
Fresh fruits	181	2.99	72.30	0.30	1.32	1.83	14.75	4.82	0.71	0.98
Fresh vegetables	421	50.64	28.36	0.47	0.86	5.95	4.27	0.70	2.66	6.10
Processed vegetables & fruits	2,003	54.99	13.85	1.04	6.72	16.83	0.36	1.33	2.22	2.65
Vegetable & fruit juice	115	21.44	7.43	7.34	27.44	24.51	1.73	3.94	0.93	5.23
Tree nuts	142	45.78	19.02	3.22	10.40	15.79	0.00	2.63	2.72	0.42
Pulses	242	24.82	29.63	0.05	2.61	12.88	0.08	0.78	8.25	20.90
Total vegetable and fruit exports	3,104	47.35	20.46	1.18	6.23	14.41	1.74	1.56	2.64	4.44

Average change, 1998-2000.

Source: Global Agricultural Trade System, Foreign Agricultural Service, USDA.

Economic Research Service, USDA

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The upswing in fresh fruit imports was due in part to China's relaxation of trade barriers, particularly its stringent phytosanitary regulations, since the mid-1990s. For example, China's direct imports of U.S. citrus fruits (mainly oranges) surged in 2000 following the Agreement on U.S.-China Agricultural Cooperation which, effective in early 2000, lifted Chinese phytosanitary restrictions on importation of U.S. fresh citrus fruit and other commodities (meat, poultry products, and wheat).

China's imports of U.S. processed products also increased substantially, although to a lesser degree than fresh fruit. In particular, imports of processed potatoes (both frozen and other processed) and sweet corn (both frozen and canned) accelerated in the 1990s, reflecting rapid westernization in

the Chinese diet as incomes increased, mainly in coastal areas. These products accounted for nearly 75 percent of China's imports of U.S. processed products during 1998-2000, increasing from 25 percent during 1992-94.

The outlook for China's performance in the global market for vegetables and fruits will undoubtedly be shaped by broad-based agricultural and trade policies. But, it may also be affected by a recent development in its primary export market, Japan.

Japanese officials recently detected excessive pesticide residue in imported Chinese produce, and earlier this year began testing all vegetables imported from China for chemical residues. As a result, some

of Japan's food producers have reduced their use of selected Chinese-grown vegetables because of food safety concerns, while others intend to upgrade their product safety inspection processes to monitor the quality of Chinese-grown vegetables. Depending on how Chinese food and agricultural industries respond to these findings, China's status as the lead supplier of vegetables to Japan may be affected.

China's entry into the World Trade Organization in December 2001 will most likely lead to relaxation of trade barriers, which, combined with the effects of two decades of robust economic growth, may result in significant increases in imports.



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### Further Reading

**For more information, visit the ERS website:**

Huang, Sophia Wu. "China Increases Exports of Fresh and Frozen Vegetables To Japan,"  
[www.ers.usda.gov/publications/vgs/aug02/vgs292-01/vgs29201.pdf](http://www.ers.usda.gov/publications/vgs/aug02/vgs292-01/vgs29201.pdf)

Huang, Sophia Wu. "China: An Emerging Market for Fresh Fruit Exporters," special article in -  
[www.ers.usda.gov/publications/fts/mar02/fts297.pdf](http://www.ers.usda.gov/publications/fts/mar02/fts297.pdf)

Foreign Agriculture Service, USDA. GAIN Report # JA2034, Aug. 19, 2002.